

Amendments to the Claims:

1. (Currently Amended) A method for detecting PrP<sup>res</sup> in a biological sample, using a solid support, in particular microtitration plates or magnetic beads, on which plasminogen is immobilized, which method ~~is characterized in that~~ it comprises:

(a) a step ~~which consists in~~ of preparing the biological sample, during which step this sample is incubated in a buffer selected from the group consisting of:

(i) buffers for homogenizing the biological sample comprising (1) a buffer selected from the group consisting of buffers comprising at least one surfactant selected from the group consisting of ionic surfactants and nonionic surfactants, a glucose-containing buffer, a sucrose-based buffer and a PBS buffer and (2) optionally, a proteinase K at a final concentration of between 1 and 8 µg/ml, ~~preferably at a final concentration of between 2 and 4 µg/ml~~, and

(ii) capture buffers comprising at least (1) a surfactant selected from the group consisting of ionic surfactants, and (2) optionally, a proteinase K at a final concentration of between 1 and 8 µg/ml, ~~preferably at a final concentration of between 2 and 4 µg/ml~~;

(b) a step ~~which consists in~~ of capturing PrP<sup>res</sup> on said solid support, ~~necessarily~~ carried out in the presence of a capture buffer as defined above, without PK, by incubation of the biological sample obtained in step (a) with said support on which plasminogen is covalently immobilized;

(c) a step ~~which consists~~ of controlled denaturation of the PrP<sup>res</sup> attached to said support by means of the plasminogen, comprising incubation of the PrP<sup>res</sup> with a denaturing buffer comprising at least one chaotropic agent, at a temperature of between ambient temperature and 100°C, and

(d) a step ~~which consists in~~ of detecting the denatured PrP<sup>res</sup> attached to said support, with a PrP protein-specific antibody.

2. (Currently Amended) The method as claimed in claim 1, ~~characterized in that~~ wherein the ionic surfactant used in step (a) or in step (b) is selected from the group consisting of:

- anionic surfactants, such as SDS (sodium dodecyl sulfate), sarkosyl (lauroylsarcosine), sodium cholate, sodium deoxycholate (DOC) or sodium taurocholate; and
- zwitterionic surfactants such as SB 3-10 (decylsulfobetaine), SB 3-12 (dodecylsulfobetaine), SB 3-14 (tetradecylsulfobetaine), SB 3-16 (hexadecyl-sulfobetaine), CHAPS or deoxy-CHAPS.

3. (Currently Amended) The method as claimed in claim 1, wherein ~~or claim 2,~~ characterized ~~in that~~ the nonionic surfactant used in step (a) ~~of the method according to the invention~~ is selected from the group consisting of C12E8 (dodecyl octaethylene glycol), Triton X100, Triton X114, Tween 20, Tween 80, MEGA 9 (nonanoyl methyl glucamine), octylglucoside, LDAO (dodecyl dimethylamine oxide) or NP40.

4. (Currently Amended) The method as claimed in claim 1, wherein ~~any one of claims 1 to 3,~~ characterized ~~in that~~ the incubation time in step (a) is between 5 and 30 minutes at 37°C, ~~preferably for 10 minutes at 37°C.~~

5. (Currently Amended) The method as claimed in claim 1, wherein ~~any one of claims 1 to 4,~~ characterized ~~in that~~ the capture buffer preferably comprises sarkosyl at a final concentration of between 0.5% and 2% (w/v), ~~even more preferably at a final concentration of sarkosyl of 1% (w/v).~~

6. (Currently Amended) The method as claimed in claim 1, wherein ~~any one of claims 1 to 5,~~ characterized ~~in that~~ the capture buffer also comprises a salt preferably selected from alkali metal salts.

7. (Currently Amended) The method as claimed in claim 6, wherein ~~characterized in that~~ said salt is sodium chloride, at a concentration of between 0.15 M and 0.5 M.

8. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 7, characterized in that the capture buffer also comprises a protein, ~~and even more preferably bovine serum albumin at a concentration of 0.2 mg/ml.~~

9. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 8, characterized in that the incubation time in step (b) is between 1 hour and 4 hours at ambient temperature.

10. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 9, characterized in that step (b) also comprises, if necessary, prior to said incubation, a dilution of the biological sample obtained in step (a) in said capture buffer, so as to obtain the adjustment of the protein concentration.

11. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 10, characterized in that the chaotropic agent used in the controlled denaturation step (c) is selected from the group consisting of urea, a guanidine salt, such as guanidine hydrochloride or guanidine thiocyanate, and sodium thiocyanate, or a mixture thereof.

12. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 11, characterized in that the incubation time in step (c) is between 10 and 60 minutes; ~~preferably either for 30 minutes at 37°C with the microtitration plates or for 10 minutes at 100°C with the magnetic beads.~~

13. (Currently Amended) The method as claimed in claim 1, wherein any one of claims 1 to 12, characterized in that the tracer antibody in step (d) is selected from the group consisting of SAF antibodies and anti-recombinant PrP antibodies.

14. (Currently Amended) A diagnostic kit for ~~carrying out the method as claimed in any one of claims 1 to 13, characterized in that it comprises~~ detecting PrP<sup>res</sup> in a biological sample comprising, in combination:

- at least one ~~homogenizing buffer as defined above~~ for homogenizing the biological sample comprising (1) a buffer selected from the group consisting of buffers comprising at least one surfactant selected from the group consisting of ionic surfactants and nonionic surfactants, a glucose-containing buffer, a sucrose-based buffer and a PBS buffer and (2) optionally, a proteinase K at a final concentration of between 1 and 8  $\mu\text{g/ml}$ ,

- at least one capture buffer ~~as defined above~~ comprising at least (1) a surfactant selected from the group consisting of ionic surfactants, and (2) optionally, a proteinase K at a final concentration of between 1 and 8  $\mu\text{g/ml}$ ,

- at least one denaturing buffer ~~as defined above~~ comprising at least one chaotropic agent,  
- a proteinase K at a final concentration of between 1 and 8  $\mu\text{g/ml}$ , ~~preferably at a final concentration of between 2 and 4  $\mu\text{g/ml}$ , and~~  
- a solid support to which plasminogen is covalently attached.

15. (New) The method as claimed in claim 1, wherein the proteinase K in the homogenizing buffer is at a final concentration of between 2 and 4  $\mu\text{g/ml}$ .

16. (New) The method as claimed in claim 5, wherein the final concentration of sarkosyl is 1% (w/v).

17. (New) The method as claimed in claim 8, wherein the protein in the capture buffer includes bovine serum albumin at a concentration of 0.2 mg/ml.

18. (New) The method as claimed in claim 12, wherein the incubation time is either for 30 minutes at 37°C with the microtitration plates or for 10 minutes at 100°C with the magnetic beads.

19. (New) The diagnostic kit as claimed in claim 14, wherein the proteinase K in the homogenizing buffer is at a final concentration of between 2 and 4  $\mu\text{g/ml}$ .

20. (New) The diagnostic kit as claimed in claim 14, wherein the proteinase K in the capture buffer is at a final concentration of between 2 and 4  $\mu\text{g/ml}$ .